Description	Specifications
Model	HDDA38E-V1.3
HDMI Inputs	3
HDMI Outputs	8
Version	1.3
HDCP	Yes
IN/Out Connectors	19 pin HDMI female type-A
RS-232 control port	1
Display Selection	Remote, Manual, Smart Scan
Video Resolution	480 P, 720 I/P, 1080 I/P
Video Data Rate	6.75 Gbps
Vertical Frequency Scan Rate	24/50/60 Hz
Dimension	14.54 x 4.77 x 1.67 inch (369.3 x 121.2 x 42.4mm)
DC adapter (included)	5VDC, 2.5A
Rackmount capable	1RU, Rack mounts included
Remote control (IR)	Infrared, Discrete code

For Questions and support:

Email: info@octavainc.com
URL: www.octavainc.com

Copyright© 2009 Octava Inc. All rights reserved.
HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LL.C
All trademarks are the sole property of their respective companies

Rev.D

OCTAVA™ 3x8 HD Distribution Amp

PRO HD HOME THEATER SERIES

User's Guide

Table of contents

1. Application Diagram

2. Installation

3. Smart Scan™

4. Configuring Smart Scan™

5. Description

6. Features

7. Remote Control Guide

8. RS-232 Control Commands

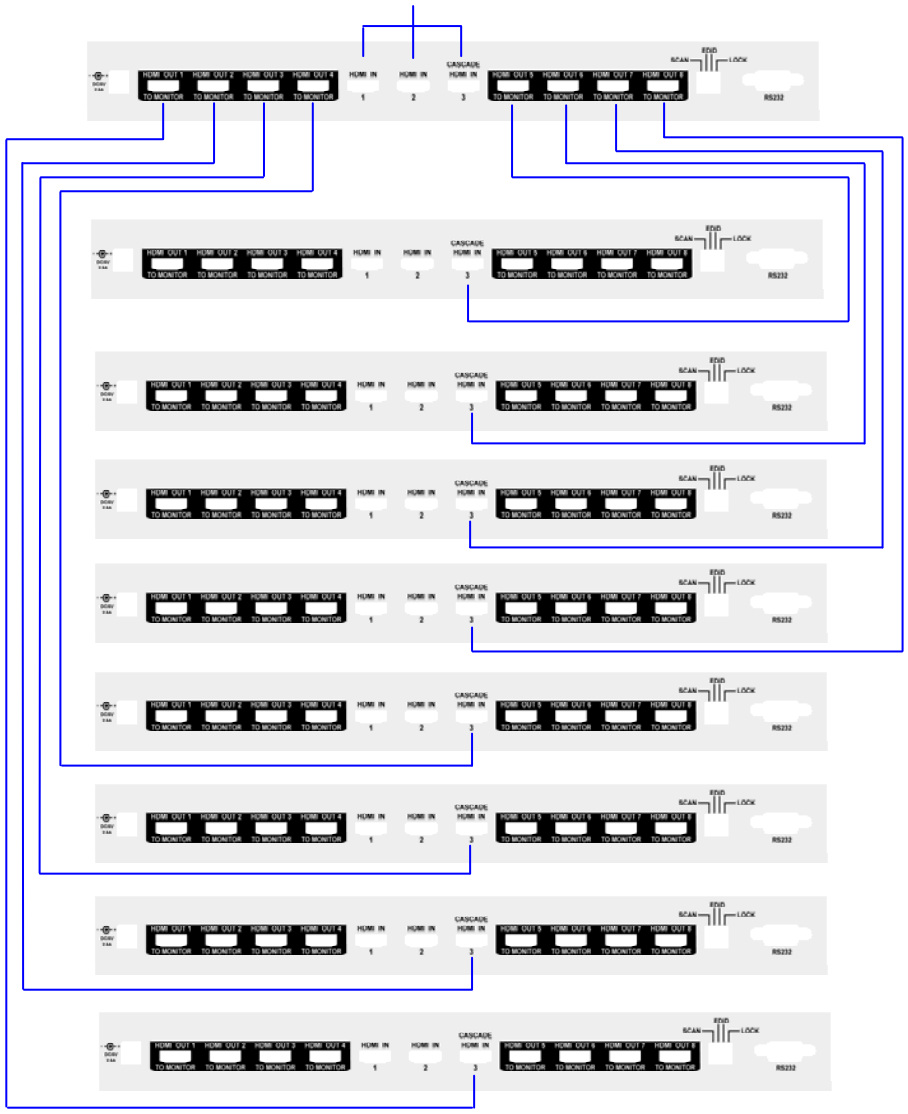
9. EDID Configuration

10. Changing EDID mode

11. 1 RU Rackmount

12. Disabling / Enabling IR Remote Control Receiver

Cascade Diagram:



Application Diagram

Installation:

1)Connect the Monitors to the HDMI OUT ports
2)Connect the HDMI sources to the HDMI INPUTS
3)Connect the DC power adapter

Cascading 3x8 Amp:

The 3x8 HD distribution amp can be cascaded to distribute to more than 8 displays.

For best performance when cascading amps, please connect using the port labeled "cascade" *(see page 13 for cascade diagram)*

Configuring Smart Scan™:

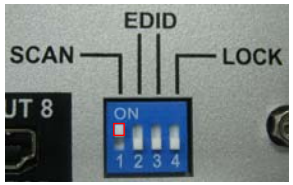
The Smart Scan is disabled before shipment. It is recommended to leave Smart Scan disabled in most applications.

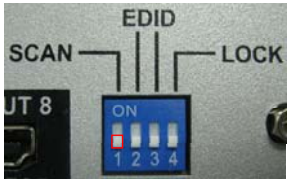
To enable the **Smart Scan™**

1) Set the Configuration switch #1 to the up position.
2) Re-power the matrix.

To disable **Smart Scan™**

1) Set the Configuration switch #1 to the down position.
2) Re-power the matrix.





Description:

The Octava 3x8 HD Distribution Amp is designed for Professional HD installation requiring multiple HD displays. The 3x8 HDMI distribution amplifier includes 3 HDMI source inputs and 8 HDMI outputs. The 3x8 HDMI Distribution Amplifier can be used in standalone application to distribute HDMI video and audio to 8 HD displays or cascaded to create large HD display centers requiring more than 8 HD displays.

The 3x8 HDMI Distribution Amp is housed in a 1RU high unit and includes rack mounts for easy integration in professional 19" equipment racks. Dedicated RS-232 port allows easy integration with 3rd party control software.

Our proprietary Clear EYE™ transmission line and ISI reduction design will IMPROVE the digital video signals. **Smart Scan™** algorithm intelligently selects the correct HDMI source so you can enjoy the program instead of fumbling with the remote.

Disabling / Enabling IR Remote Control Receiver:

To enable the IR receiver- remove the plastic plug from the IR jack as shown above.

To disable the IR receiver- insert the plastic plug into the IR jack as shown above.

IR disabled

IR enabled

1 RU Rackmount :

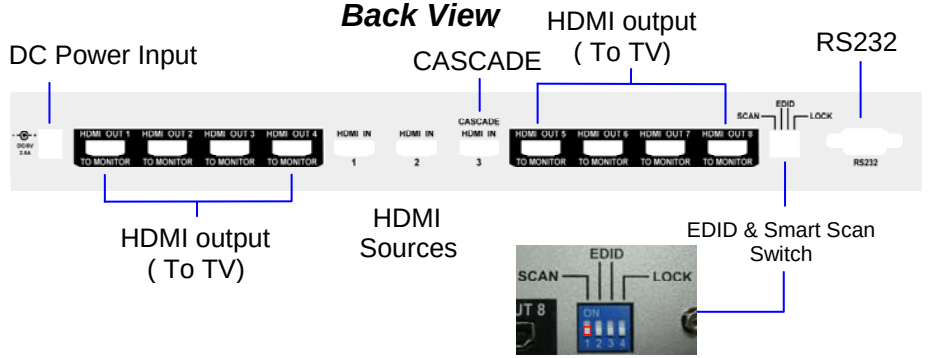
The Octava 3x8 HD Distribution Amp can be installed in a 1 RU rack by simply installing the rack mounts included.

Features:

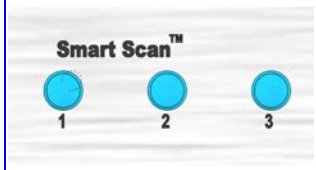
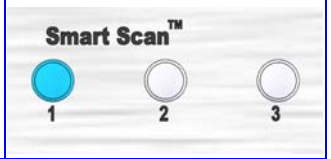
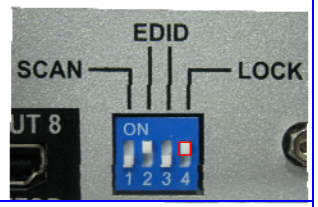
- V1.3, 1080P.
- 3 HDMI inputs.
- 8 HDMI outputs.
- RS-232 port for integrating with 3rd party control systems.
- Cascadeable for creating large HDTV display kiosks.
- Dedicated hardware HDCP engine for robust and secure HDCP operation.
- 1RU rackmount capable. Rack mounts included.
- Works with HDMI or DVI-D, HDCP-enabled HDTV.
- Supports high resolution video 480 P, 720 I/P, 1080 I/P.
- **Smart Scan** ™ algorithm intelligently selects the correct input.
- **Clear EYE**™ design optimizes HDMI signal transmission.
- Backward compatible with DVI-D.
- Remote Control (IR) included. Discrete Code allows direct channel control.
- LED dimming control for ultimate viewing.

Front View

Back View

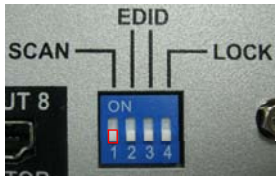
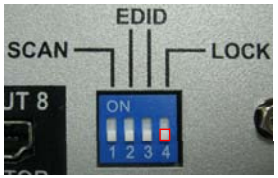
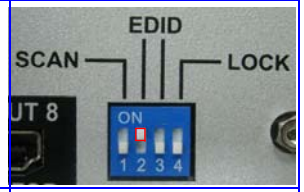
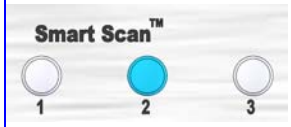


Switch Number	1	2	3	4
Name	Smart Scan Switch	EDID switch	EDID switch	LOCK switch
Function	Enable/disable Smart Scan	EDID MODE select	EDID MODE select	Lock settings.
	Down = Smart Scan Off Up= Smart Scan ON			Down= Unlocked Up= Locked

7	Press the ▶▶| button on the front panel. LED will flash for ~2 min while programming.	Programming will take ~2 minutes. LED will flash while programming.	
8	Wait. Programming is complete when LED indicates “1”		
9	Set to LOCK Position		
11	Connect all video sources and displays and turn ON	.	
12	Re-power the HDDA38E.		

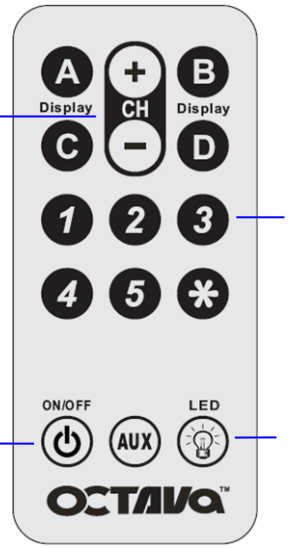
Changing EDID mode:

It is recommended to keep the EDID in the factory default MODE1. If necessary, you may set to different EDID mode by following these instructions.

Step	Action	LED Indictor	Notes
1	Set the Smart Scan switch to OFF		
2	Disconnect all sources and display from HDDA38		
3	Set the Lock Switch to Unlock		
4	Set the EDID to the mode desired.(MODE 2 shown.)	See page 8 for other EDID modes)	
5	Reset Power to the HDDA38 by disconnecting the power and reconnecting power.	.	
6	The LED will now indicate the EDID Mode that you will program.(mode 2 shown)	LED “2” will flash.	

Remote Control Guide:

Pressing **+/-** Increments/Decrements to the next available Source.



Pressing 1,2,3 Selects the corresponding numbered source.

Pressing ON/OFF Turns On/Off the HDDA38E

Pressing LED Turns on/off the Blue LED light.

Button	Function	Notes
+, -	Increments/Decrements to the next available Source	
1,2,3	Selects the corresponding numbered source.	
	Turns ON/OFF the LED light.	
	Turns ON/OFF the HDDA38.	
Other	Not used	

Octava’s Remote control uses discrete code so can be easily integrated with most Universal Remote Controls such as Logitech’s Harmony.

RS-232 Control Commands

The Octava 3x8 HD Distribution Amp can be easily integrated with 3rd Party control systems via RS-232 control. The following shows the control protocol for controlling the HDDA38E.

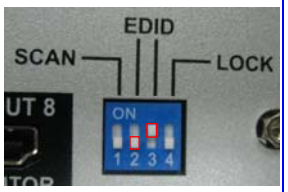
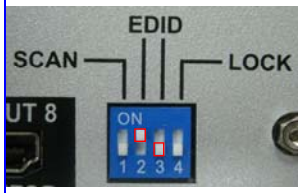
RS-232 protocol	
Baud Rate	9600
Data Bits	8
Parity Check	none
Stop Bits	1
Flow control	none

Basic controls				
Note: The commands are in HEX. No spaces between HEX codes.				
	HEX CODE			
Port Status	0x02	0x30	0x31	0x03
Turn ON LED	0x02	0x30	0x33	0x03
Turn OFF LED	0x02	0x30	0x34	0x03
Turn ON Power	0x02	0x30	0x35	0x03
Turn OFF Power	0x02	0x30	0x36	0x03
Turn ON Smart Scan	0x02	0x30	0x37	0x03
Turn OFF Smart Scan	0x02	0x30	0x38	0x03

Switching Commands				
Note: The commands are in HEX. No spaces between HEX codes.				
	HEX CODE			
Select OUTPUT to Input port 1	0x02	0x32	0x31	0x03
Select OUTPUT to Input port 2	0x02	0x32	0x32	0x03
Select OUTPUT to Input port 3	0x02	0x32	0x33	0x03

EDID Configuration:

The HDDA38E can be configured to 3 EDID settings.
It is recommended to keep the EDID in the default factory mode 1.

Mode	Video	Audio	Description	Switch settings
1	480I,720I/P, 1080I/P	PCM / Bitstream	Default Mode	
2	480I, 720I/P, 1080I/P. Reads EDID of all monitors and sets to : Video=min. Resolution of displays connected.	PCM / Bitstream If a display is bitstream capable, then store as Bitstream capable.	Parsing/ Read Mode	
3	480I,720I/P, 1080I	PCM	Basic Mode